

CLAIMS

What is claimed is:

1. A fiber optic module, comprising
 - an electromagnetic interference (EMI) shield; and
 - a first housing insert molded with the EMI shield.
2. The module of claim 1, wherein the EMI shield comprises:
 - a conductive mesh; and
 - conductive contact fingers.
3. The module of claim 2, wherein the EMI shield further comprises conductive shield sidewalls around the mesh, the contact fingers extending from the shield sidewalls.
4. The module of claim 2, wherein the first housing is injection molded through the mesh of the EMI shield.
5. The module of claim 4, wherein the first housing comprises:
 - a non-conductive housing floor;
 - non-conductive housing sidewalls; and
 - a non-conductive nose defining at least one connector receptacle, wherein the housing floor and the housing sidewalls are injection molded through the mesh of the EMI shield to be integral with the nose and so that the shield sidewalls and the contact fingers at least partially surround the nose.
6. The module of claim 5, further comprising:
 - an optoelectronic subassembly mounted in the first housing; and
 - a second housing mounted to the first housing to enclose the optoelectronic subassembly.
7. The module of claim 6, wherein the optoelectronic subassembly comprises:

a circuit board;

at least one optical subassembly mounted on the circuit board; and

at least one connector interface.

8. The module of claim 7, wherein the mesh defines at least one opening and said at least one connector interface abuts the mesh about said at least one opening for receiving a fiber optic connector.

9. The module of claim 7, wherein the at least one connector interface is selected from the group consisting of LC, SC, and MTRJ connector interfaces.

10. The module of claim 1, wherein the module is selected from the group consisting of a small form-factor pluggable (SFP) transceiver module, a Gigabit Interface Converter (GBIC) transceiver module, and 1×9 transceiver module.

11. A method for making a fiber optic module, comprising

forming an electromagnetic interference (EMI) shield; and

insert-molding a first housing with the EMI shield.

12. The method of claim 11, wherein said forming an EMI shield comprises:

forming a conductive mesh; and

forming conductive contact fingers.

13. The method of claim 12, wherein said forming an EMI shield further comprises forming conductive shield sidewalls around the mesh, wherein said forming conductive contact fingers further comprises forming contact fingers extending from the shield sidewalls.

14. The method of claim 12, wherein the first housing is injection molded through the mesh of the EMI shield.

15. The method of claim 13, wherein said injection-molding a first housing comprises:

forming a non-conductive housing floor;

forming non-conductive housing sidewalls; and

forming a non-conductive nose defining at least one connector receptacle, wherein the housing floor and the housing sidewalls are injection molded through the mesh of the EMI shield to be integral with the nose and so that the shield sidewalls and the contact fingers at least partially surround the nose.

16. The module of claim 14, further comprising:

mounting an optoelectronic subassembly in the first housing; and

mounting a second housing to the first housing to enclose the optoelectronic subassembly.

17. The module of claim 15, wherein the optoelectronic subassembly comprises:

a circuit board;

at least one optical subassembly mounted on the circuit board; and

at least one connector interface.

18. The module of claim 16, wherein the mesh defines at least one opening and said mounting an optoelectronic subassembly in the first housing comprises abutting said at least one connector interface to the mesh about said at least one opening for receiving a fiber optic connector.

19. The module of claim 17, wherein the at least one connector interface is selected from the group consisting of LC and SC connector interface.

20. The module of claim 11, wherein the module is selected from the group consisting of a small form-factor pluggable (SFP) transceiver module, a Gigabit Interface Converter (GBIC) transceiver module, and 1×9 transceiver module.